

Dr. Sylvia Wilson Thomas is currently an Associate Professor in Electrical Engineering and former Assistant Dean for the College of Engineering at the University of South Florida in Tampa, Florida. She holds B.S. and M.S. degrees in Electrical Engineering from Vanderbilt University, where she was a Patricia Roberts Harris Fellow. Dr. Thomas received her Ph.D. in Electrical Engineering from Howard University, as a NSF Materials Research Center of Excellence Fellow. Dr. Thomas was a National Science Foundation (NSF) research engineer in Korea at Chonbuk National University. She holds two patents and has over twelve years of industry experience, assisting in the success of such companies and organizations as Agere Systems formerly Lucent Bell Labs, the National GEM Consortium, ITT Technical Institute, Kimberly Clark Corp., IBM, and Procter & Gamble. Dr. Thomas is also the USF GEM Consortium Representative and an Alfred P. Sloan Foundation Minority Ph.D. Mentor.

### **Research Interests**

Sylvia Wilson Thomas, Ph.D. leads the Advanced Materials Bio and Integration Research (AMBIR) laboratory at USF. Dr. Thomas' research and teaching endeavors are focused on advanced materials for alternative energy sources, sustainable environments, aerospace, and bio-applications from the micro to the nano scale. Her research explores the synthesis and device integration of inorganic and organic thin films and nanofibers. Thomas' research group specializes in characterizing, modeling, and integrating materials that demonstrate high levels of biocompatibility, thermal reflectivity, mechanical robustness, and environmental sustainability, such as carbides, sol-gel coatings, high temperature oxides, and mucilage. Her research is interdisciplinary in nature and fosters collaborations with Chemical and Biomedical, Mechanical, and Environmental Engineering, Physics, Chemistry, Public Health, Medicine, and the Nanotechnology Research and Education Center (NREC).

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